

**ARBOVIRUS, ARENAVIRUS, AND FILOVIRUS
DISEASES**

Distinguishing Symptoms	Viral Agent or Disease	Family	Vector	Major Distribution
Fever, malaise, headaches, myalgias				
Additional features: none	Colorado tick fever	Reoviridae (Coltivirus)	Tick	Western US, western Canada
	Phlebotomus fever	Bunyaviridae (Phlebovirus)	Sand fly	Mediterranean basin, Balkans, Middle East, Pakistan, India, China, eastern Africa, Panama, Brazil
	Venezuelan equine encephalitis	Togaviridae (Alphavirus)	Mosquito	Argentina, Brazil, northern South America, Panama, Mexico, Florida
	Rift Valley fever*	Bunyaviridae (Phlebovirus)	Mosquito	South Africa, eastern Africa, Egypt
Lymphadenopathy, rash	Dengue fever	Flaviviridae	Mosquito	Southeast Asia, Africa, Oceania, Australia, South America, Mexico, Caribbean, US
	West Nile fever	Flaviviridae	Mosquito	Africa, Middle East, southern France, former Soviet Union, India, Indonesia, US
Arthralgia, rash	Chikungunya disease	Togaviridae (Alphavirus)	Mosquito	Africa, India, Guam, Southeast Asia, New Guinea, limited areas of Europe
	Mayaro virus	Togaviridae (Alphavirus)	Mosquito	Brazil, Bolivia, Trinidad
	Ross River virus	Togaviridae (Alphavirus)	Mosquito	Australia, New Guinea, Solomon Islands, Samoa, Cook Islands
	Barmah Forest virus	Togaviridae (Alphavirus)	Mosquito	Australia
	Sindbis virus disease (Ockelbo disease, Karelian fever)	Togaviridae (Alphavirus)	Mosquito	Africa, Australia, former Soviet Union, Finland, Sweden
Hemorrhagic signs [†]	Yellow fever	Flaviviridae	Mosquito	Central and South America, Africa
	Dengue hemorrhagic fever	Flaviviridae	Mosquito	Southeast Asia, Oceania, Caribbean
	Kyasanur Forest disease	Flaviviridae	Tick	India
	Omsk hemorrhagic fever	Flaviviridae	Tick	Former Soviet Union
	Crimean-Congo hemorrhagic fever	Bunyaviridae (Nairovirus)	Tick	Africa, southern and eastern Europe, India, China, Middle East, former Soviet Union
	Hantaan virus	Bunyaviridae (Hantavirus)	Rodent	Korea, Japan, China, Southeast Asia, Europe
	Seoul virus	Bunyaviridae (Hantavirus)	Rodent	Korea, Japan
	Puumala virus (Nephropathia epidemica)	Bunyaviridae (Hantavirus)	Rodent	Scandinavia, former Soviet Union

*Rift Valley fever also causes hemorrhage, meningoencephalitis, and ocular disorders.

[†]The Seoul, Puumala, Dobrava, and Hantaan hantaviruses cause hemorrhagic fever-renal syndrome.

**ARBOVIRUS, ARENAVIRUS, AND FILOVIRUS
DISEASES—Continued**

Distinguishing Symptoms	Viral Agent or Disease	Family	Vector	Major Distribution
Fever, malaise, headaches, myalgias (continued)				
	Machupo virus	Arenaviridae	Rodent	Bolivia
	Junin virus	Arenaviridae	Rodent	Argentina
	Guanarito virus	Arenaviridae	Rodent	Venezuela
	Lassa fever	Arenaviridae	Rodent, human to human	West Africa
	Marburg virus	Filoviridae	Unknown, human to human	Zimbabwe, Kenya, Uganda
	Ebola virus	Filoviridae	Unknown, human to human	Zaire, Sudan
Noncardiogenic pulmonary edema	Hantavirus: Sin Nombre, Black Creek Canal, Bayou, New York-1, Rio Mamore	Bunyaviridae (Hantavirus)	Rodent	US (west of Mississippi River), Canada, Brazil, Bolivia, Paraguay, Argentina
Fever and CNS involvement				
	Eastern equine encephalitis	Togaviridae (Alphavirus)	Mosquito	Atlantic and Gulf coasts of US, Caribbean, upper New York, western Michigan
	Western equine encephalitis	Togaviridae (Alphavirus)	Mosquito	US, Canada, Central and South America
	West Nile virus	Flaviviridae	Mosquito	Africa, Middle East, southern France, former Soviet Union, India, Indonesia, US
	St. Louis encephalitis	Flaviviridae	Mosquito	US, Caribbean
	Venezuelan equine encephalitis	Togaviridae (Alphavirus)	Mosquito	Argentina, Brazil, northern South America, Panama, Mexico, Florida
	La Crosse encephalitis	Bunyaviridae	Mosquito	North Central States, New York
	Japanese encephalitis	Flaviviridae	Mosquito	Japan, Korea, China, India, Philippines, Southeast Asia, former Soviet Union (eastern)
	Powassan virus	Flaviviridae	Tick	Eastern Canada, New York
	Murray Valley encephalitis	Flaviviridae	Mosquito	Australia, New Guinea
	Kyasanur Forest disease	Flaviviridae	Tick	India
	Tick-borne encephalitis	Flaviviridae	Tick	Europe, Balkans, former Soviet Union
	Lymphocytic choriomeningitis	Arenaviridae	Rodent	US, Argentina, Germany, Balkans

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